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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/042,248

01/11/2002

Karine Ragil

PET-1710 C1

6990

23599

7590

02/23/2010

MILLEN, WHITE, ZELANO & BRANIGAN, P.C.

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ARLINGTON, VA 22201

EXAMINER

NGUYEN, TAM M

ART UNIT

PAPER NUMBER

1797

NOTIFICATION DATE

DELIVERY MODE

02/23/2010

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

docketing@mwzb.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/042,248	<b>Applicant(s)</b> RAGIL ET AL.	
	<b>Examiner</b> TAM M. NGUYEN	<b>Art Unit</b> 1797	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 08 January 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 6-9, 11-26 and 29-42 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 6-9, 11-26 and 29-42 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                    | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)         | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                          |

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**DETAILED ACTION**

In view of the appeal brief, filed on 1/8/2008, PROSECUTION IS HEREBY REOPENED. A new ground(s) of rejection is set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have been increased since they were previously paid, then appellant must pay the difference between the increased fees and the amount previously paid.

A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by signing below:

/Glenn A Caldarola/

Acting SPE of Art Unit 1797

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

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(2) request reinstatement of the appeal.

If reinstatement of the appeal is requested, such request must be accompanied by a supplemental appeal brief, but no new amendments, affidavits (37 CFR 1.130, 1.131 or 1.132) or other evidence are permitted. See 37 CFR 1.193(b)(2).

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 6, 7, 12-25, 29-34, 38, 39, and 42 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The limitation “wherein the feed is a fresh feed not previously treated as to separated di-branched and tri-branched paraffins therefrom” in claims 6, 38, and 39 was not described in the specification at the time the application was filed.

Claims 6-9, 11-26, and 29-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stem et al. (US 4,982,048).

Stem discloses an isomerization to produce components for gasoline pool. The process comprises passing a hydrocarbon feed comprising C<sub>6+</sub> including C<sub>7</sub> and C<sub>5-</sub> components into an isomerization zone to produce a mixture comprising multi-branched paraffins (e.g., di and tri-

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branched paraffins), mono-branched paraffin, and normal paraffin. The mixture is then passed into a separation zone to produce a multi-branched paraffinic (e.g., di and tri-branched paraffins) stream, a mono-branched paraffin stream, and normal paraffin stream. Stem also teaches that the process may comprise two separated isomerization zones with the normal paraffins being isomerized in the first zone and the mono-methyl paraffins being isomerized in the second zone. The isomerization process is operated at temperatures ranging from 200° to 400° C and at pressures ranging from 10-40 bars (1 to 4 Mpa). The isomerization process is operated in the presence of hydrogen and catalyst. It is noted that Stem does not disclose that the isomerization feed comprises multi-branched paraffins. However, there no separation is 100% effective. Therefore, it would be expected that the isomerization feed from the upstream separation zone would comprises at least some small amount of multi-branched paraffins. The isomerization catalyst can be a mono-function catalyst. (See col. 3, line 55 through col. 4, line 57; col. 9, lines 14-53, and 68; column 10, lines 1-15; column 11, lines 46-68; column 12, lines 1-22; col. 17, lines 9-33; and Figures 2-7)

Stem does not specifically disclose that the multi-branched paraffin stream provides a minimum content of 2 % weight of C<sub>7</sub> di-branched paraffins, does not disclose the locations and the zones as in claim 9, and does not disclose that the feed is a fresh feed not previously treated as to separated di-branched and tri-branched paraffins therefrom

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the process of Stem by using a feed comprising the claimed amount of C<sub>7</sub> paraffins because Stem teaches that the feedstock can comprise quantities of C<sub>7</sub> paraffins (see col. 5, lines 57-62). Therefore, one of skill in the art would utilize a

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feedstock comprising any amount of C<sub>7</sub> paraffins including the claimed amount with the expectation that a feedstock comprising any amount of C<sub>7</sub> paraffins would be effectively processed in the process of Stem. As a result, it would be expected the product stream would comprise at least 2 wt. % of C<sub>7</sub> di-branched paraffins.

It also would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the process of Stem by locating the zones as in claim 9 because the process of Stem is a cyclic process and the locations of the zones would not affect the outcome of the process since the feed is ultimately passed through each zone.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the process of Stem by omitting the pre-treating step when fresh feed comprised primary n-paraffins is used.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TAM M. NGUYEN whose telephone number is (571)272-1452. The examiner can normally be reached on Monday through Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Caldarola can be reached on (571) 272-1444. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

TN  
/Tam M. Nguyen/  
Primary Examiner, Art Unit 1797

/Glenn A Caldarola/  
Acting SPE of Art Unit 1797